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## THE METONYMS AND DEAF CHILDREN

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**Abstract:** Language is an abstract system of symbols, which is concretely realized by way of speech, writing and signing.

Difficulties in speech and communication in deaf children cause problems in their social, emotional and cognitive development. Deaf children show inadequate results on semantic tests due to their inadequate knowledge of the language, the level of concreteness and underdeveloped linguistic associations.

These problems can be for the most part overcome with the adoption of sign language.

The aim of our study was to evaluate the meanings of certain words and their association by deaf children, attending grades six to eight-24 students; as well as to establish the development of the category of metonym words. We also wanted to examine the strength of the relationship between the knowledge of sign language and the level of knowledge of this category of words, if one existed at all.

The study incorporated a segment of the Semantic Test by S. Vladislavljevic. Pupils were given 20 words-notions (snail, gold, snake, deer, flower, drop, fair, fox, rock and rabbit) and it was requested of them to give all possible meanings for those words.

A qualitative and quantitative analysis was completed of the obtained linguistic material. The obtained results showed a partial influence of the pupil's age and the level of knowledge of metonyms. Also, it was observed that better knowledge of sign language affects the results of the deaf pupils, i.e. they had better speech and understanding of word meanings.

**Key words:** metonyms, semantic, speech, writing, signing language, deaf children

### Introduction

Semantics is the study of meanings within a language and it is concentrated on the phenomenon how people exchange words with one another within the scope of their language. When referring to the number of words which individuals make use of in their daily lives we observe that in the population of educated people in developed societies this number is approximately twenty thousand. Whereas, it is important to differentiate between active and passive lexicon, that is, the words we use ourselves and the ones we understand, precisely or roughly, although we do not utilize them.

A word as a unit of a vocabulary (lexicon) of a language with all of its grammatical forms and possible phraseological extensions is called a lexeme.

Lexicon is the speakers' use of a certain vocabulary and the correct usage of listed words in practical situations. It also includes specific components of selection restrictions, which are the rules which define the types of words that can be combined together when forming a sentence (Dimic, 1996).

Vocabulary building is the most tangible characteristic of language acquisition in the first months of life. From the moment when the first word is identified, steady lexical development in both the understanding and production of a language is effectuated. It is considered that a child of 18 months can produce about fifty words and understand about five times as many words. Around the second year the spoken vocabulary surpasses 200 words. During the third year, there occurs an impressive growth in the scope and diversity of vocabulary, and that to an extent where precise calculations (especially relating to understanding of the vocabulary) or establishing the norm of the spoken lexical frequency have shown to be impossible. After six years of age, children develop the ability to use

figurative phrases and to understand dual meanings. In this latter period the ability of a child emerges to integrate a number of characteristics of semantic knowledge into one statement which represents a definition. Semantic development continues throughout the period of schooling, or better said an entire lifetime. There will always be new words that need to be learned and new meanings that need to be sought.

### ***Formation of notions in deaf children***

Many authors emphasize that the process of understanding the meanings of words always involves the “selection of a meaning amongst many possible ones”. The child does not choose a meaning of a word by himself. Instead, he obtains the meaning in the process of spoken communication with the environment that surrounds him. A child follows the speech of those who are older than him, thus adopting concrete word meanings, which are already established and given to him as such. The child does not create his own speech; instead it adopts the “ready-made” speech of the adults surrounding him.

Working with children on forming notions represents an important segment in working with deaf children. Correct formation of notions enables a deaf child to denominate the notions that exist in his mind, that is, for the child to find verbal expression and in that way enable him to free his thoughts from using gestures to signify activities or objects. New notions should be presented, whilst those already adopted should be continually expanded, so that they will become permanent property of the child.

A child has adopted a notion, once it has come to understand that a word is only something that is used to signify an object, event or occurrence and that by using that word the child is transmitting its thoughts and feelings (Dimic, 2003).

Deaf individuals have a hard time forming abstract notions, because their process of thought only unravels within the sphere of what can be seen.

Although nouns are the word type most often found in the vocabulary of hearing impaired children, these children show difficulty in adopting abstract nouns. The obvious way of thinking and dominance of the visual factor, which are characteristic of the hearing impaired, play a crucial role in the formation of notions (Dimic, Isakovic, 2007).

Savic (1996) provides particular set of principles relating to the formation of notions in deaf children and emphasizes their goal is for the notion to be “unbound from a concrete object” and make it a source of thought development and adoption of notions of higher rank – abstract notions – which the child will use independently in all situations.

Deaf individuals, who do not acquire speech in the process of live interaction, but instead by way of special education, often adopt only one, narrow meaning of a word and do not master “flexible polysemy” of words which allows for the meaning to change in relation to the context. For this reason, the task of a deaf-mute child whence adoption a language doesn’t not only consist of simple adoption of a certain vocabulary, instead multiple word meanings are pointed out in their use, as well as their various dictionary meanings (Luria, 1982).

Prior to a word being understood as a sign for an object, it must first pass through the stage of representing an object characteristic and that it is an entity of its own. When it “matures” the words is no longer associated with an object or activity, but stands on its own signifying an object or activity.

Words can be understood at different levels of completeness of their meaning. One of the tasks of a teacher is to expand the meanings of already learned words, in accordance with age level.

### ***Sign and Verbal Linguistic Expression***

The most complex and precise means of communication is spoken language, which in addition to pronunciation - articulation has a written form as well – script. The simplest and most natural form of communication is gesture.

Deaf children, in their expression, aside from spoken and written language primarily use sign language.

Speech by way of sign is a main source of communication amongst deaf individuals. They, in their expression, in addition to spoken and written language primarily use sign language. Sign language is the natural language of the deaf, one that is spontaneously developed by them. Sign language has a significant stimulative role in the development of cognitive functioning. (Kovacevic, Isakovic, Dimic, 2010).

“Language, as an abstract symbolic system, is concretely effectuated by speech (most often), script (less of often) and gesture (most rarely). For the form (substance) by way of which language is concretely effectuated in linguistics is referred to with the term expression. Each of the three mentioned ways of effectuation of language has its advantages and disadvantages. They mutually supplement each other and the result is an individual’s ability to communicate with other people and his need to communicate even in the most unfavorable conditions. (Kasic, 2000).

“In the development of individuals with hearing impairment gestures have a great significance. A deaf individual is a visual type and everything he learns and experiences is by way of sight. Optical pictures which they

receive from the outside world are concrete, direct, static or dynamic. They develop gestures as speech based on their own spontaneous movement and simulation of the environment. Communication by way of movement is the result of psychological development of a deaf child, and movement itself aid that development.

Gestures are used to express static or dynamic characteristics of the content which is being spoken of. When enrolled into school a deaf child bears certain gestures which are specific to the family and only the family understands them. Once in school the child quickly learns the movements in its surroundings. Deaf children whose parents are also deaf, are socially and communicatively more developed than deaf children who have hearing parents when they come to school, because they have developed the ability to communicate by way of gesture." (Dimic, 2002).

Today, we know that sign languages have a structure that in their complexity can be compared with the structure of a spoken or written language. In different parts of the world varying sign languages are used and they are not mutually understandable. Different signs and different rules for their formation are used (different order of signs), as well as different sentence structures (Crystal, 1996).

Should deaf children be thought sign language, is a very old question that has been the subject of many debates. The main argument against sign language is that it separates deaf individuals from everyone, except from those in their immediate small community. In that way they become marked, different and diverse and they are disabled from communicating with the hearing world.

On the contrary, insisting on verbal speech, which is most often limited and difficult to understand for deaf persons, increases their isolation even more. Today, it is known that a deaf child, or a hearing child that has parents who are deaf, learns sign language as their "mother tongue" and produces a level of manual awareness and refinement which differs from the awareness of deaf children with hearing parents or persons who can hear and who have learned sign language.

Many studies show that early bilingualism of hearing impaired children (knowledge of sign language and spoken/written language) is of invaluable importance for their development. With the adoption of sign language problems in limited receipt of messages and restricted communication, are eliminated. Deaf children have higher self-esteem, are more communicative, more independent than others, and have more adequate reactions in various everyday life situations and show a lower level of frustration connected with their relations with the hearing population.

Also, recent studies (Most, 2003) show that children that communicate using sign language show more variation and flexibility in their behavior, than they do when communicating using verbal speech. It is necessary to equally develop linguistic communication by way of both sign and spoken language and to not forget that children have a need to communicate in both languages.

### ***Study Goals***

The aim of this study was to examine the meanings of certain words and their associations in deaf children, enrolled in grades six to eight and to establish how the development of the metonym (those are words-stimulus which induce expression of transferable meaning) word category takes place. Also, we were interested to see the relationship between knowledge of sign language and the adoption level of this category of words, that is, if any existed.

### ***Instruments***

The study utilized a segment of the Semantic Test (S.Vladislavljevic). The pupils are given 10 nouns-notions by way of which the knowledge of the meaning of these words is tested, as well as their active use. The given nouns (for which we requested an adequate metonym) were: (snail, gold, snake, fawn, flower, drop, fair, fox, rock and rabbit). The pupils were asked to give all possible meanings for those words.

Nouns have special significance in speech and language. They are used to express the most concrete and abstract meanings in a language, which cannot be expressed by any other type of word. Each positive answer is given one point.

### ***Sample***

The study was implemented at schools for deaf children in Belgrade. The study encompassed pupils attending grades six to eight (8 pupils from each grade).

### ***Methodology of data processing***

In the review and processing of the data we used the statistic packaged for data processing SPSS 14.0. We applied the descriptive statistics procedure (mean score and SD, as well as statistical significance of the differences seen in the average values (t-test for dependent samples, for checking the significance of the differences at the level of the entire sample and non-parametric Mann-Whitney U-test for checking the statistical significance of differences between the students of varying grade levels).

## ***Study Results***

### ***Quantitative analysis of the acquired data***

In analyzing the obtained results within the scope of the entire sample we observed that the minimal number of achieved points in spoken and sign language forms of expression was one (1), whilst the maximum number of points received was 12 (twelve) for (sign language) and 13 (thirteen) in (spoken form of expression). In comparing these results ( $M_{\text{speech}}=7.4167$  and  $M_{\text{sign l.}}=6.7083$  we did not observe any statistically significant differences Sig. (2-tailed) .208).

There was also no statistically significant difference found when comparing the results between the pupils enrolled in different grades.

### ***Qualitative analysis of the acquired data***

The word: SNAIL

Adequate responses were: small, slow, slowness

Other received responses: animal, ugly, lazy, slow, goes slowly, weak, on foot.

The greatest numbers of responses were given using sign language expression.

The word: GOLD

The received responses were: good, she is good, valuable, obedient

The most common responses were: yellow, light, shiny, little chain, ring, earrings, necklace, beautiful, gorgeous, shines nicely, husband-wife (ring), gold-love-husband, chain, wedding, watch, money, expensive, cash, gold coin

Inadequate responses were: glass, iron, silver, cute

The word: SNAKE

The given responses included: poisonous\*, evil\* (\*given in both genders in Serbian/she is evil, he is evil)

Other responses included; fast, animal, does not love, catch-bite, scare.

As a wrong response, the word WOOD was seen.

The word: FAWN

Adequate response was gentle.

The pupils gave the following responses: small, peaceful, cuddle, deer, female deer, scare, scare you, afraid of, beautiful, animal, Africa, slow, very cute.

Specific and incorrect responses included: black, black color, white.

The word: FLOWER

The given answers were pretty, beautiful, smells, aromatic.

Responses given often, but are incorrect: smells nice, beautiful flower, tulip, snowdrop, rose, green, yellow, plant, flowers, grows, pokes, girl-gift, happy, good.

The word: DROP

The adequate response was small, little.

The pupils gave the following inadequate responses: in the nose, eye-nose, hat, scarf, when you drink medicine, water, rain falling, drink, wash hands, one, juice, drop for nose, drop for ear, drop for eye.

The word: FAIR

The pupils gave the following responses: crowded, very crowded.

Also characteristic are the responses: there is a big crowd at night lots, and during the day not; amusement park, super, because people love it, car fair, crash-car, many people, we play, car hit, merry-go-round, shooting range, trophy, carousel, park, drive car, swing, fire, merry, many people.  
For the given metonym some were observed as having no response.

The word: FOX

The sought response was cunning.

Deaf pupils also gave the following responses: dangerous, lies, steals chicken, wild animal, loves to steal, steals eggs, thief, thief - meat, coward.

All pupils gave a response to the given metonym.

The word: ROCK

Adequate responses given in sign language were: hard, solid, strong.

Other inadequate responses given by deaf students: mountain, white, small-grey, rock, large rock, small, large, large boulder, strongest, stubborn.

A certain number of children gave no response.

The word: RABBIT

The most common responses were: fast, going fast, very fast, scare, I scared, he is scares.

The pupils also gave other responses: beautiful, not brave, runaway, cute, jumps, weak, escape, animal, hop, always runs away fast, running away, hungry.

All pupils gave one or more responses to the given word.

### ***Conclusions:***

1. The obtained results show that there exist conformances in the development of certain notions and certain categories of words.
2. Inadequate results of the deaf children on the semantic tests are due to the deficiency in their linguistic knowledge, concreteness and underdeveloped linguistic association. A large number of inadequate words were obtained that are specific for deaf children.
3. It was observed that there exist great individual differences between deaf pupils of the same age level.
4. The level of adoption of the tested categories of words grows with age, whilst the greatest increase in results is seen in the group of pupils attending grades 6 to 8, although this is not evident in the statistical significance calculations.
5. With age the spoken and sign language form of expression reaches equilibrium and are equally successfully used. It can be said that better development of sign language affects the better results of deaf pupils in the spoken form of expression.
6. Metonyms represent a difficulty, because children of this age group still have not sufficiently developed this form of linguistic thought. However, it was observed that deaf children better understand the transferable meaning of those words (notions) with which they have contact everyday at school. That pertains to concrete notions, characteristics of animals (snail, snake, fox, rabbit- which becomes part of everyday teachings from the earliest age, preschool level, through first songs, fairy tales, fables).

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